

Information Link

A Source of Information for Our Customers



Curtis L. Wolfe

With the recent conclusion of the 2005 Legislative Session, I am able to update you on the Information Technology Department's (ITD) budget and specific legislation that impacts various aspects of information technology (IT) in state government.

First of all, I was pleased to see the Legislature support employee raises of 4 percent in each of the next two years. Unfortunately, the \$5 million for an equity fund was not approved. Even with these raises, the State has not raised salaries enough to allow us to be competitive with the private sector.

With regard to ITD's budget, we did well. The Legislature approved all our requests in the Governor's budget with the exception of funds requested for the Educational Technology Council's (ETC) K-12 technology grants. Even with a substantial reduction, the ETC has over \$500,000 for K-12 grants. The requested budget for the Criminal Justice Sharing System (CJIS) initiative was also reduced. This was a new initiative to fund the on-going operation of the CJIS Hub and several new interfaces to additional criminal justice information sources. The operational cost of \$281,000 for the Hub was funded along with \$244,000 approved for new interfaces. I believe we were fortunate to get this level of funding for this new program, since we were told at the start of the session that no new initiatives would be approved.

A number of technology specific bills were discussed during the session. Below is a brief summary of these bills:

■ **HB 1035 - Government Performance and Accountability**

This bill was crafted during the interim by a special legislative committee. It focused on the creation and reporting of performance metrics by state agencies to help the Legislature make informed policy decisions. We suggested to the committee that the PeopleSoft Enterprise Performance Management (EPM) product could

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help automate this process. The bill was strongly supported by the House but less so by the Senate. This bill was significantly modified by the Senate to support additional study during the next interim which will focus on a few agencies that already have developed a manual performance metrics process. The study will assess the value of these metrics to the agencies as well as to know they may serve the purposes of the legislation. The ultimate bill passed both houses.

■ **HB 1074 - Assessment of computer systems and related security systems**

This bill directs the State Auditors Office to hire a consulting firm to attempt to “hack” into the state’s systems to assess:

- ◆ System vulnerability
- ◆ Network penetration
- ◆ Potential security breach
- ◆ Susceptibility to cyber attack and cyber fraud

This bill passed. I anticipate an initial test will be conducted sometime this fall and possibly a second test later in the interim.

■ **HB 1275 - IT Project Reporting**

This bill passed the Legislative Session. It requires the creation of reporting guidelines by ITD and approval by the State Information Technology Advisory Committee (SITAC) for all projects over \$250,000. Reporting must occur by milestone during the course of the project as well as upon project completion. If a milestone budget or deadline is missed by more than 20 percent, a report to SITAC on corrective measures must occur and, if the delays or additional costs continue, the project and proposed corrective measures must be reported to the Interim Legislative IT Committee.



■ **SB 2037 - Various amendments to 54-59 and 54-35 of North Dakota Century Code**

This bill was intended to address a number of issues: cleaning-up some confusing language in current statute; exempting IT standards, policies, and guidelines from the administrative rules process; enhancing the role of the enterprise architecture process; directing the development of a 10-year or more system replacement plan; and clarifying a consolidation exemption approval process.

The bill failed on the last day of the session because of acrimony between the houses regarding permanent exemptions for a few select agencies.

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■ **SB 2038 - Creation of an Enterprise Fund**

This bill proposed the establishment of a \$1,000,000 pool that could be used to fund special projects during the interim that agencies were not aware of when they proposed their budgets but bring real value to state government. This bill failed early in the session.

■ **SB 2250 - Limits on Liability**

This bill passed the Legislature. It allows the Office of Management and Budget (OMB), the Attorney General's Office, and ITD to jointly agree to limit a vendor's liability in IT contracts if the risk to the state is determined to be very small.

A final observation regarding the Session: I discussed in my last article for the *Information Link*, how we worked with SITAC to prioritize all new large IT projects over \$250,000 that required some amount of general fund dollars. All of these projects were approved by the Legislature in whole or in part. With everything said, I view this to have been a very successful Legislative Session for ITD and information technology initiatives throughout state government.

New State Portal Under Development

Vern Welder

www.nd.gov will replace discovernd.com as the official North Dakota web portal in late June 2005. Currently, the project is in the systems test phase.

The new portal is based on the popular three-column web page design. The leftmost column displays category and directory links that provide access to all of the state's web content. The middle column provides access to on-line applications and to commonly used links, similar to the format used in discovernd.com. The rightmost column is dedicated to popular and fun features, such as PowerBall numbers, State Snapshots, and the Governor's web site. To preview the new portal home page, go to a design mock-up at <http://www.state.nd.us/testingarea/josh/new-portal/>.

The portal's underlying architecture is different than the current portal's static content. Page content and links are stored in a database. A Websphere application server formats the site content from the database onto a static page that is rendered to web browsers. Storing site content on a database gives an administrator the ability to maintain the portal without programming assistance. Another new feature is the ability to start and stop displaying web links on pre-determined schedules controlled by an administrator.

Usability testing of the portal will be conducted prior to release using the Morea testing tool. The Information Technology Department (ITD) realizes that the "real" usability test comes after implementation, so please take time to "test" the new portal and submit comments. ITD appreciates feedback that will help it improve state government services to citizens.

STAGEnet Infrastructure Services (SIS 2006)

ITD is hoping to design a network that can grow with the state's needs over the next seven to 10 years.

Currently, the Information Technology Department (ITD) is in the process of gathering bids for the STAGEnet network contract. The contract with today's infrastructure provider expires in June 2006.

In order to maintain eligibility for e-rate funds, the state is required to obtain bids after each contract period. In the years during the current contract, technology has changed and the needs of the state have also increased. ITD is hoping to design a network that can grow with the state's needs over the next seven to 10 years. ITD pushed to provide a state-of-the-art statewide network helping to provide economic development across North Dakota in its first STAGEnet effort. The department is looking to again become a national model on how state government can acquire cost effective services for its needs. In turn, the state will help the vendors invest in high-tech infrastructure that provides a win for the vendors, the state, and the citizens it serves.

Some challenges the state faces are:

- ◆ The overall network population and number of sites continue to grow.
- ◆ The network core has expanded and requires an architectural review for overall capacity.
- ◆ The demand for Virtual Private Networking (VPN) challenges the current design.
- ◆ Customer demand for bandwidth continues to grow.
- ◆ Video services continue to expand across the state.
- ◆ ATM services have been reduced with recent migrations to fiber.
- ◆ Network security continues to demand changes and reconfigurations.
- ◆ The backbone is currently only accessible in Bismarck and Fargo while the demand for backbone access in other sites is increasing.
- ◆ Homeland security issues have brought new concerns to the network with respect to expanding disaster recovery, redundant connectivity, and possibly additional network hubs.
- ◆ IP Telephony and Voice-over IP (VoIP) technology will become economically feasible.

In addition, ITD recognizes that new technologies, such as MPLS, VLANs, and Lambda (light waves) are known to be generally available, and ITD wishes to explore ways to take advantage of them. Also, ITD wants explore the possibilities of wireless mobility access, increased access to fiber, and expansion of broadband services for smaller sights.



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Customers impacted by this project include all of state government, the North Dakota University System, K-12 entities, and many political subdivisions.

Customers impacted by this project include all of state government, the North Dakota University System, K-12 entities, and many political subdivisions. Several of these customers participated in focus groups that helped ITD identify the challenges and provided input on their future needs.

This project is split into three phases as indicated below:

The first phase, which has been completed, defined the future state or vision of STAGEnet's architecture (through analysis, focus groups, vendor meetings, and other design activities) and created a procurement strategy to help ITD select vendor(s) to achieve that vision.

ITD is currently in the second phase, which is acquisition including the development, release, and evaluation of the RFP; the selection of the vendor(s); and contract negotiations. A key deliverable of this stage (in addition to the contracts) is a document providing the reasons for selecting the services and vendor(s) that were chosen and providing a cost/benefit analysis for those choices.

The third phase is the implementation of chosen architecture/vendor(s). This future stage may be broken into a transition phase (part of the project) and enhancements (part of on-going operational activities).

Updates on the project will be posted to the STAGEnet website at www.stagenet.nd.gov under current projects.

ITD's e-Team Reorganized

Vern Welder

The Information Technology Department's (ITD) Software Development Division recently re-organized its e-Team. The original e-Team was established in 2000 with the goal of supporting all aspects of e-government application development and support. The e-Team's new focus is Electronic Document Management Systems (EDMS) application support, web design, IVR Support, and .NET application development.



The e-Team's e-government application developers were deployed to software development teams where they will continue to develop and support e-government applications. The software development team leader for your agency is now the contact for all of your e-government software applications.

The web designers stayed on the e-team. They were joined by EDMS analysts and .NET developers. Marlys Jangula is the Systems Development Manager for the e-Team and Della Thorsness is the team's leader.

ITD's Software Development Architecture function also moved from the e-Team to the Software Development Management team. Kyle Forster remains the contact for software development architecture issues. He may be contacted at kforster@state.nd.us.

Single Point of Contact

Gary J. Vetter

It is imperative that the Service Center evolves into ITD's "Single Point of Contact" for customers.

META Group states "nearly 60% of Information Technology (IT) service providers now report that implementing standard processes is one of their most significant issues, and 34% note it as their top concern." This trend is consistent with ongoing initiatives within the Information Technology Department. Applying industry "best practices" in IT Service Management has become a top-priority.

One related project is taking a fresh look at ITD's Service Center and the processes related to Incident Management. In order to be successful, it is imperative that the Service Center evolves into ITD's "**Single Point of Contact**" for customers.

As a small step in this direction, ITD has changed the "[Contact Us](http://www.state.nd.us/itd/contact-us.html)" link (<http://www.state.nd.us/itd/contact-us.html>) on its website to lead customers to the Service Center to report problems, ask questions, request information, or offer feedback. Please contact ITD at (701) 328-4470 or (800) 837-9807 with all of your day-to-day service needs.

In addition, a link has been added for customers who wish to file a **Formal Complaint** regarding the service they receive from ITD. North Dakota Century Code requires ITD to document information related to service support and delivery, including agency complaints regarding dependability, responsiveness, and cost. This new link is designed to facilitate the process for filing formal complaints of that nature.

ITD is committed to continuous improvements in service. As stated within our Vision Statement, "We see ITD partnering with our customers to proactively develop cost-effective technology solutions." Please feel free to "[Contact Us](#)" to assist in achieving *your* mission through the innovative use of information technology.

On The Job For ITD

IT Business Analyst Pat Forster manages Information Technology procurement initiatives and assets for the Information Technology Department. Pat joined the Policy and Planning Division about a year-and-a-half ago.



"It has been an exciting learning experience for me to become part of the policy and planning team at ITD," said Pat. He really enjoys working with the people within ITD and throughout state government on enterprise procurement initiatives.

Pat grew up in Richardton, North Dakota. Following high school, he attended Dickinson State University, where he obtained a Bachelor's degree, with majors in accounting and computer science.

In his spare time, Pat enjoys pheasant hunting, fishing, and skiing.



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Open Source Operating Systems - LINUX at ITD

L. Dean Glatt

The Information Technology Department (ITD) uses many different operating systems, some of which include Linux, Windows, and UNIX. ITD utilizes open source Linux installations in a wide range of systems.

First and foremost, the decision to place an application on a Linux or Windows server is based on the vendor's recommendation. For applications that can reside on various operating systems, the stability; reliability; and performance of the application is weighed against cost. In many situations, Linux was selected based upon all of these criteria.

Currently, about 15 percent of the hundreds of servers run Linux. That may seem like a small percentage, but it is important to note that some of the most significant network, email, web servers, and web application production environments utilize these Linux systems. *ITD regards Linux as a strategic operating system* in its Intel server center. Rather than measuring the *number of systems* using Linux at ITD, one should look at the *significant role* these systems provide for the state.

Many agencies use third party software solutions that have specific operating requirements, and the greater part of such systems require Windows server operating systems. ITD generally assists in the analysis of application requirements, which helps determine what operating system those applications will run on.

ITD supports a large assortment of software systems for agencies and, in doing so, efficiencies are made by standardizing on a single vendor's brand of Linux. Specializing and learning one operating system is much more effective than learning several. Linux is "not free" - ITD makes a significant investment in staff training hours, continuing education, and technical support. As with any operating system, i.e.: Windows, UNIX, or Linux; education and support costs are necessary to keep applications and staff knowledgeable and well-versed in new versions of software.

The debate on open source and vendor specific operating systems is a debate that occupies terabytes of discussion on blogs, magazines, and reports from information technology experts Gartner, Aberdeen, and IDC groups. It is nice to report that, in light of all that debate, ITD makes strategic and effective use of open source operating systems when and where it is applicable.

